

# Modeling case essay sample



**ASSIGN  
BUSTER**

Develop the framework for a model of the life cycle of rigid plastic within a city (like outside garbage bins, those roadside orange traffic direction cones or bowling balls). The framework should resemble Figure 24. 4 but provide more detail in the use stage. What information will be easy to acquire, what difficult? What useful results might be anticipated from utilizing the model? What are some contingencies that might occur to skew model results toward uselessness? Hell, you know bowling balls could, might, maybe become discovered as the only environmentally benign bass boat anchors. What happens to the sport of bowling then? The tubes, I'm thinking; down the tubes.

## MODEL OF THE LIFE CYCLE OF RIGID PLASTIC WITHIN

### A CITY LIKE GARBAGE BINS

Of late, the responsibility for packages to the end of their life cycle, including the cost of recycling after the consumers discard their packages is being shifted to the Industry sector. The rigid plastic dumped in huge garbage collection boxes including them also are materials discarded by residential, commercial, and industrial sectors, and includes paper, food, packaging, yard waste and appliances. The main issue primarily is the sorting at the initial stage. The materials collected have to be sorted into various categories like paper, cloth, and rigid plastics.

*Out put*

*In Put*

Boundar  
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domesti  
c plastic  
substanc  
e flow

The above diagram represents the responsibilities of various organizations in this regard.

#### PLAN FOR WASTE COLLECTION

#### AND FURTHER PROCESS

Initially Garbage Bins are kept for reusable plastic waste as well other forms of public waste like paper and cloth. They are used to collect all forms of waste.

After central sorting, paper, clothing etc are separated and sent to the incineration, where they are used for heating energy which saves the use of alternate energy. recycling companies for regranulation and reuse. Use of this regranulated material helps in avoiding the use of virgin plastic material resulting in substantial savings at the national scale. Thus the recovery of

plastic from households, industry and aquaculture has been more successful in terms of cost efficiency. The only argument that high grade material plastic will have to be downgraded to low grade does not materially mitigate the benefits of the system.

Now let us analyze the system of collection of waste material. It has been argued that separate bins might be kept for collecting the plastic and other ingredients. But even in advanced economies it was not found practical as citizens have no time to do this sorting by themselves.

At all levels, from National to the municipal, the will to implement this sorting and incinerating program will have to be inculcated and imbibed by citizens themselves in order to effect substantial savings in power and virgin plastic requirements.

The main problems faced in the controlling and optimizing of the life cycle of plastic is the inadequacy of number of Garbage bins and cost of collection of garbage at frequent intervals and transportation of the same to Recycling Agents. Many Municipalities, town councils and State authorities have left it to Individual players, who collect the plastic garbage at tuppence and sell it to the Recycle manufacturers. However when left to the Recycle Industries, commercial outlook comes into play with very little concern for environmental haphazard's but changes should be carried in the design of source separation and central sorting stage of life cycle of plastic . . . In other words, obstacles to the recovery of ideal plastic will have to be identified at all levels.

Socio economic factors are also playing a major share in this important scenario. Level of education of the household members and their domestic staff also come into play.

At the social level the habits of the population in cleanliness and conduct contribute whereas in economic level the incomes and expenditure of the families, clubs and public

Awareness.

Plastic has been quite useful to the humanity. In due course biodegradable plastics will be synthesized and used. But until that time, Govt, Business and public will have to find ways to cooperate, help and supplement each others' efforts to utilize the plastics to the maximum benefit of humanity.

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